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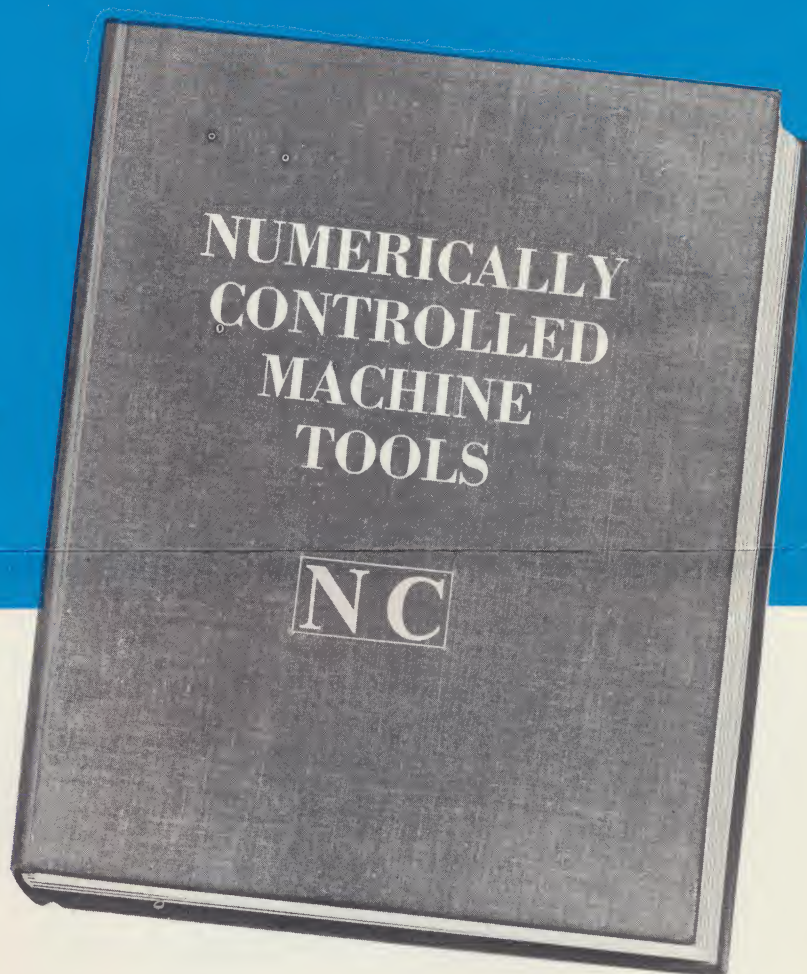


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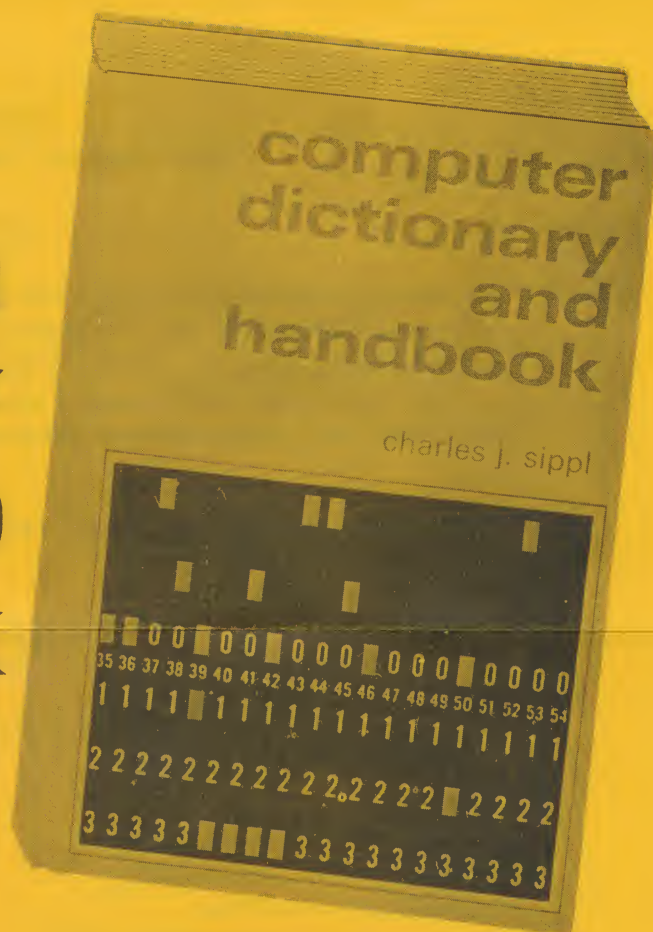
BY CHARLES J. SIPPL

Since no suitable dictionary of terms used in the entire field was available, Charles J. Sippl has prepared COMPUTER DICTIONARY AND HANDBOOK to meet this important need. Unabridged, the dictionary is the only complete and up-to-date definition and spelling reference available covering all phases of computers and their applications.

It lists more than 8,500 definitions, acronyms and abbreviations of computer terms. Authoritative and unabridged, this dictionary is suitable for professional reference use -- in libraries, in schools and for industry.

Actually, this reference is far more than just a dictionary. The 26 concise appendices cover numerous aspects of electronic data processing, programming and applications.

Students, engineers, technicians and others whose jobs or interests are affected by, or involved in, computer functions will find this book extremely useful.



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ABOUT THE AUTHOR

Charles J. Sippl has taught marketing, mathematics of finance, economics, statistics, quantitative analysis for business and economics, and is presently teaching four different Computer-Science courses at the University of California at Los Angeles (Ext.). He received his Bachelor of Science degree from the University of Wisconsin, Master of Arts degree from the University of Miami and is completing his Doctor of Philosophy work at the University of California at Los Angeles.

SEE BACK OF PAGE FOR DETAILED DESCRIPTION OF CONTENTS

CONTENTS OF COMPUTER DICTIONARY AND HANDBOOK

by Charles J. Sippl

This definitive dictionary contains over 8,500 explanations of computer and related terms, acronyms, and abbreviations. Arranged in easy-to-use alphabetical order, the dictionary will be of reference assistance to everyone directly or indirectly involved with computers.

The following comprehensive appendices form the most up-to-date source for information on all phases of the computer field.

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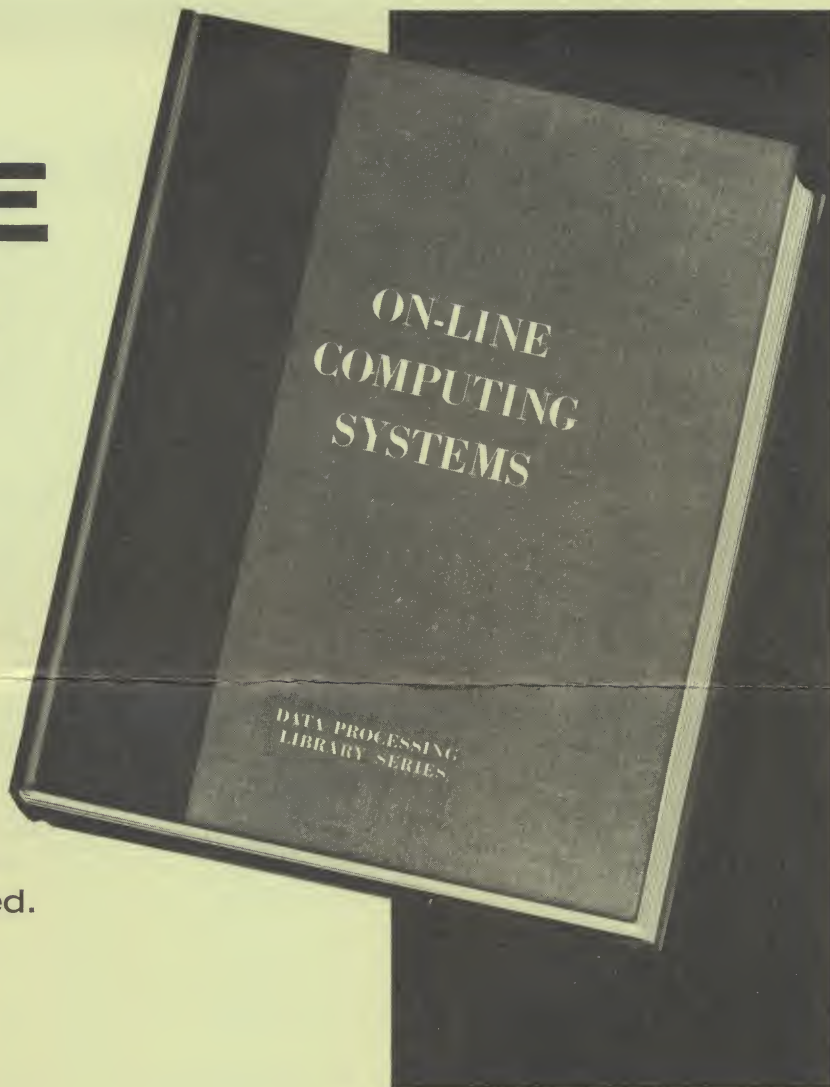
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On-line computing systems include at least two important classes of systems. The first is one in which response times are measured in milliseconds. Such systems are automatic, and many of them are closed loop, since the timing requirements preclude the intervention of men. Examples are process control applications, military satellite control systems, and radar tracking and recording systems.

The second important class includes computer systems to which several interrogation and display devices are connected, thus establishing man/machine communication. Examples are found in military command and control systems, space vehicle command and control systems, and various commercial systems.

This book considers both classes of on-line systems. In addition, it covers, with a considerable degree of thoroughness, the principles, disciplines, and practices which are applicable to on-line systems design, both in machinery and programming.

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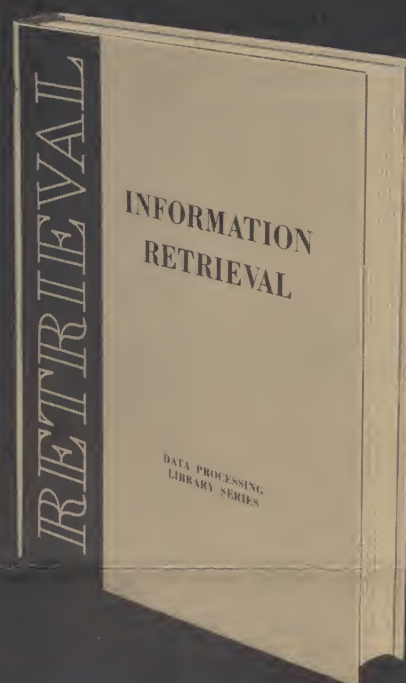
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The Management Problem — A view of various aspects of the management problem and some of their interrelationships. Reports on science information centers and the management situation. A summary of the material on information retrieval management.

Communications Aspects — A study of the facets of communications peculiar to science information centers — the general business intelligence system, the nature of the scientist, the compatibility of the new information services with other information activities and some problems involved in integration of these services, and the problem of customer communication with a digital computer information retrieval system.

Problem Definition — These chapters provide specific approaches to certain areas of interest to management: a survey technique used to determine design information for an information center; criteria for the economic justification of

an information center; and guidelines for the decision to mechanize a technical information activity.

Systems Experience — Reports on the operating experience of one governmental and two industrial environments, considering in some detail the situation in which each exists, the types of services provided to the customers, and problems associated with the operation of the centers. Particular emphasis is given to the problems of financing an industrial technical information center.

A new dimension in science information is presently in the developmental stage; there is as yet no single philosophy, approach, or set of conclusions.

Defining and solving the problems of information storage and retrieval, and associated managerial problems, is a challenge, but one that is being met with some progress.

Information Retrieval Management contributes to a better understanding of the science information process, and provides helpful guidelines for managers and information specialists. In this volume is represented the thinking of the leading experts in this field, who offer their points of view, opinions and reports of experience to assist management in formulating its role in the systems approach for storage and retrieval of information.

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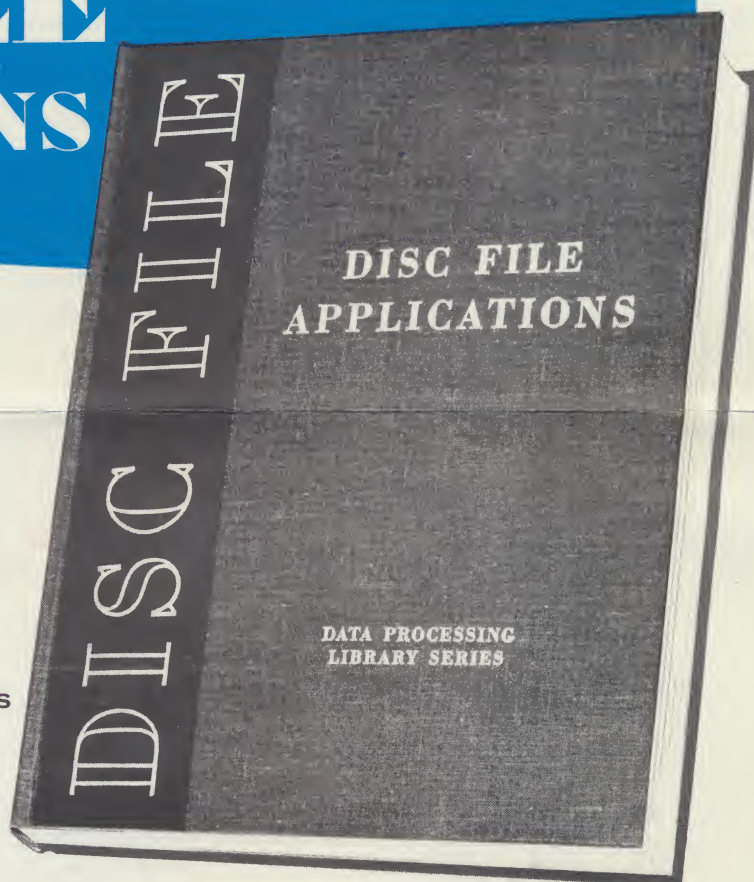
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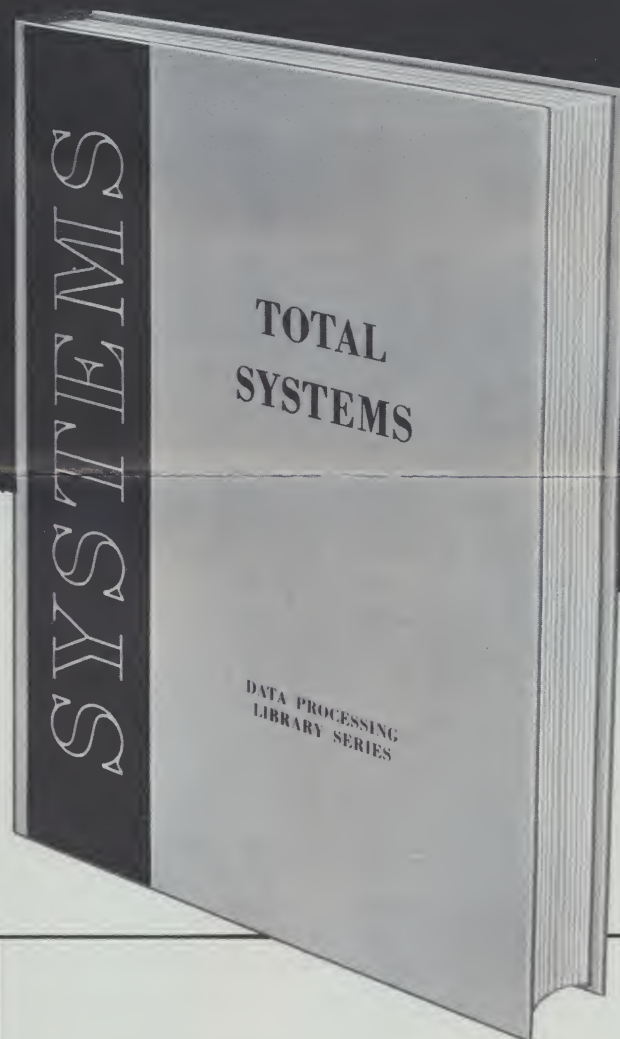
The information in this volume provides the key to the most effective and profitable data processing operations. **TOTAL SYSTEMS** is the concept of inter-relating all company activities in line with corporate policies and objectives.

If you, like so many others, have had a tendency to be principally "machine oriented," this volume will help get you on the systems track. If you have been thinking largely in terms of individual applications of data processing equipment, this volume will motivate you to think of the more broad relationship of hardware to overall operations.

This is a "how to" book. It helps you establish a total systems operation in your organization, giving you the benefit of the experience of dozens of authorities on the subject, with actual case studies as a further guide.

In setting out to collect the most authoritative opinion available about the total systems idea, the Editors sought out well known systems experts and asked for their recommendations. The lists of authorities thus compiled bore a striking but not surprising resemblance to one another. Those who are at the forefront of total systems development know their peers. They are not misled by the vast and somewhat appalling array of recently published material dealing casually or directly with total systems but saying nothing.

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ELECTRONIC INFORMATION DISPLAYS

FOR MANAGEMENT

The outlook is for information displays, controlled from a display console, to become a major managerial tool. As costs decrease, system programs are designed, and companies improve information input quality and establish data banks, the use of display systems will increase. The technology is available now. It remains for management to want sufficiently to take the steps to install this new technology as a system subset of the total institutional information system.

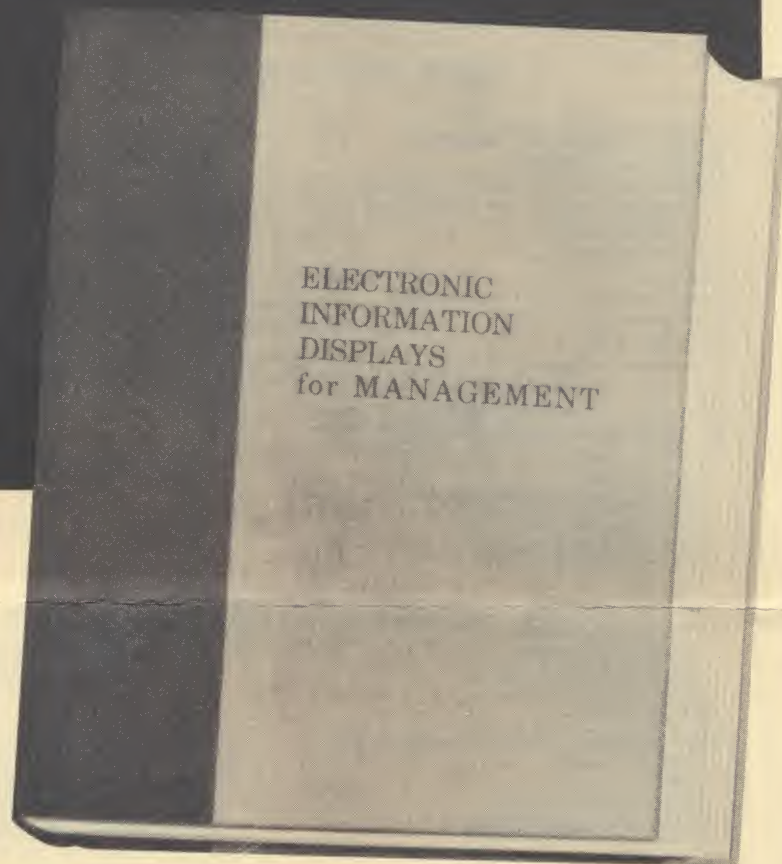
The information presented in this book is primarily for managers. Yet the specialist too can get an overall view of the electronic information display field, covering disciplines with which he may not now be sufficiently familiar. And it will assist him in his day to day specialized work by highlighting different applications for display usage. The author's purpose has been to put together in a single volume material on electronic information displays that has been widely dispersed and unconnected, and thus not readily accessible to the busy manager.

The book is organized to facilitate its use for reference purposes. Each chapter takes up a specific topic. The introductory chapter presents the historical background of displays, and describes briefly their potential significance for management.

In order to establish the frame of reference for information displays in management use, and to provide a base for the remainder of the book, a general description of management information systems is included. Additionally, since most of the sophistication in information displays has been in military systems, it has been considered proper to differentiate between the basic requirements of these two areas of use.

The principal purpose of considering information display subsystems is to provide better communication with the data processing facility. Accordingly, this book gives an overview of the display system in relation to man-machine communications. Further, the general concept of the information display system is presented. The two-way aspect of communication is emphasized.

This book should prove an important guide to managers who must be alert to using the new tools of executive information and control systems. In addition to clear delineation of the role of displays, there are several important reference features—bibliography, glossary, names and addresses of manufacturers of display equipment, and cost information.



BY JAMES H. HOWARD

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ABOUT THE AUTHOR

from the foreword by Lowell H. Hattery, Professor of Management and Public Administration, The American University

Rear Adm. James H. Howard, USN, (Ret.) is well-qualified to describe, evaluate and give guidance to management on information display systems. As a career naval officer he was intimately acquainted with advanced communications systems and with the requirements of command and control systems. He understands managerial information requirements for decision-making. At The American University he was engaged in digital computer education and gave leadership to the development of symposia and studies related to electronic displays and communications systems. He is a Fellow and Charter Member of the Society for Information Display.

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